

In the Specification

[0081] Data filter 1305 includes a series of N data registers 1310 that provide a sequence of data samples Dout to a pattern-matching circuit 1315. In this case N is three, but N may be more or fewer. Data filter 1305 also includes a series of M (e.g., two) error registers 1320 that convey a sequence of error samples to an input of an AND gate 1325. AND gate 1325 only passes the error signals from registers 1320 as filtered error signal ErrFil if pattern-matching circuit 1315 asserts [[a]] an error-valid signal ErrVal on the other input of AND gate 1325. Pattern-matching circuit 1315 asserts signal ErrVal only if the pattern presented by registers 1310 matches some predetermined pattern or patterns stored in pattern-matching circuit 1315. In one embodiment external test circuitry (not shown) controls the patterns provided by matching circuit 1315. Other embodiments support in-system testing with one or more patterns provided internally (e.g., on the same semiconductor chip).